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### REMARKS

Claims 1- 11, 14-15, 24, 26-73 and 75-78 are pending in the application, of which claims 1 and 7 are being amended. Applicant requests entry of the claim amendments which are fully supported by the specification and original claims and add no new matter. Reconsideration of the present case in view of the amendments and remarks herein is earnestly requested.

#### Allowed Claims

Applicant appreciates the Examiner's indication of allowance of claims 10, 11, 14, 15, 24, 26-30, 33-36, 40-73, and 75-78.

Applicant also appreciates the Examiner's indication that claims 7 and 37-39 would be allowable if rewritten in independent form including all of the limitations of the base claims and any intervening claims.

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**Rejections Under 35 U.S.C 103(a) of Claims 1- 6, 8- 9 and 31-32**

The Examiner rejected claims 1-2, 6, 9 and 31 under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,137,701 to Mundt in view of U.S. Patent No. 5,468,356 to Uhm. This rejection is traversed.

Claim 1 has been amended to recite all of the limitations of objected to claim 7. Thus, claim 1 as amended represents objected to claim 7 rewritten in independent form, and claim 1 and the claims depending therefrom are patentable over Mundt in view of Uhm. Claim 1 is furthermore patentable because, as the Examiner stated in paper no. 27, the exhaust tube of the "closest related art, by Randall S. Mundt ... is not described as being fabricated from monocrystalline sapphire."

The Examiner rejected claims 3-5, 8 and 32 under 35 U.S.C. 103(a) as being unpatentable over Mundt in view of Uhm, and further in view of U.S. Patent No. 4,735,633 to Chiu. This rejection is traversed.

As discussed above, claim 1 has been amended to recite all of the limitations of objected to claim 7, thus claim 1 and the claims depending therefrom are patentable over Mundt in view of Uhm and Chiu.

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### CONCLUSION

For the foregoing reasons, allowance of the instant application is respectfully requested. Should the Examiner have any questions regarding the above amendments or remarks, the Examiner is requested to telephone Applicant's representative at the number listed below.

Respectfully submitted,

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MARKED UP CLAIMS FOR S/N 09/055,201

1. (amended seven times) A process chamber for processing a substrate in a process gas and reducing emissions of hazardous gas to the environment, the process chamber comprising:
- (a) a support capable of supporting the substrate;
  - (b) a gas distributor capable of introducing process gas into the process chamber;
  - (c) a gas activator capable of activating the process gas to perform a process in the process chamber thereby forming effluent containing hazardous gas;
  - (d) an exhaust tube through which the effluent may be flowed, the exhaust tube comprising sapphire and the exhaust tube being adapted to provide a non-circuitous and non-turbulent flow of effluent therethrough by being substantially absent projections or recesses (i) that alter the flow direction of the effluent to provide a circuitous flow of effluent through the exhaust tube, and (ii) that cause turbulence in the flow of the effluent through the exhaust tube; and
  - (e) a microwave energy applicator to couple microwaves to the effluent flowing through the exhaust tube to reduce the hazardous gas content of the effluent.
7. (amended four times) The process chamber of claim 1 wherein the [exhaust tube] sapphire comprises monocrystalline sapphire.